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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,229	06/25/2004	Raimund Kram	03869-105012	7455
86528	7590	06/10/2010	EXAMINER	
King & Spalding LLP 401 Congress Avenue Suite 3200 Austin, TX 78701			HARTMAN JR, RONALD D	
			ART UNIT	PAPER NUMBER
			2121	
			NOTIFICATION DATE	DELIVERY MODE
			06/10/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

AustinUSPTO@kslaw.com
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Office Action Summary	Application No. 10/500,229	Applicant(s) KRAM ET AL.	
	Examiner RONALD D. HARTMAN JR	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-50 and 52-56 is/are pending in the application.
- 4a) Of the above claim(s) 22 and 45-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-44 and 52-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 53 and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 53 and 56 are confusing as it recites the command variable and the secondary variable capable of being interpreted as only one of the listed variables, which conflicts with claims 23 and 44, which state that the variables must be different, and would therefore infer at least two variables.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23-44 and 52-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Penkar et al., U.S. Patent No. 4,773,025.

As per claim 23, this claim recites a profile stored in a memory. The profile comprises two variables (a command variable and a secondary variable). The command variable is different than the secondary variable. One of the variables comprises a variable from the group consisting of a time dependent variable and a

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location dependent variable. Also, this claim recites a program that activates (interpreted as “running” or “implementing”) the profile.

Penkar et al. discloses a multi-axis robot control system utilizing a curve fitted path control methodology. The system includes a digital control means which generates position commands in accordance with moves set forth in a robot program (e.g. See C3 L6-8). The system includes a planning program for generating a time profile including acceleration, slew and deceleration time segments for each commanded robot program move (e.g. See C3 L8-12). The system further includes a trajectory program generating means which includes stored curve defining equations, each having predetermined variables (e.g. See C3 L18-28). Penkar et al. further describes that robot control executes commands based on spline functions up to and including third order polynomials (e.g. See C8 L1-4). Penkar et al. further discloses that the invention may use higher order polynomials, but does not explicitly specify what this term encompasses, or what is actually meant by higher order. Suffice to say, it would appear that higher order would include forth order, or greater, polynomials.

As per claim 24, Penkar et al. inherently discloses profiles being created since a profile cannot be used unless it is first created.

As per claim 25, Penkar et al. discloses a spline interpolation (e.g. See C17 L5 – C20 L5).

As per claims 26 and 27, Penkar et al. discloses a polynomial interpolation, of up to at least a 3rd order (e.g. See C8 L1-4).

As per claim 28, Penkar et al. discloses a trigonometric element (e.g. See C13 L21 and C14 L20-21).

As per claim 29, Penkar et al. discloses a plurality of segments derived from mathematical equations (e.g. See C3 L8-12).

As per claims 30 and 31, Penkar et al. discloses utilizing splines to smooth the plurality of segments (e.g. See C10 L60-67).

As per claim 32, Penkar et al. discloses a movable machine element being associated with an axis which is associated with the profile (e.g. See title and abstract. Also the citations utilized in the rejection of claim 23, from above, are applied herein.)

As per claim 52, Penkar et al. discloses accessing the profile from memory (e.g. See Figure 5).

As per claim 53, Penkar et al. discloses variables being representative of speed and position (e.g. See Figure 5).

As per claim 33, the rejection of claims 23 and 24, from above, are applied herein.

As per claim 34, the rejection of claim 25, from above, is applied herein.

As per claim 35, the rejection of claim 26, from above, is applied herein.

As per claim 36, the rejection of claim 28, from above, is applied herein.

As per claims 37 and 38, the rejections of claims 30 and 31, from above, are applied herein.

As per claims 39 and 40, Penkar et al. discloses that the profile describes a position and/or movement of an axis (e.g. See Figure 5).

As per claim 41, since Penkar et al. does not specifically disclose the profile being defined with any particular units, the disclosure of Penkar et al. adequately anticipates this feature.

As per claim 42, Penkar et al. discloses a profile being formed during a program processing phase (e.g. See Figure 6).

As per claim 43, Penkar et al. discloses a profile being created by a graphic tool in an engineering system (e.g. a computer having a graphical display).

As per claim 44, the rejection of claim 23, from above, is applied herein.

As per claims 54 and 55, the rejection of claim 23, from above, is applied herein.

As per claim 56, the rejection of claim 53, from above, is applied herein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONALD D. HARTMAN JR whose telephone number is (571)272-3684. The examiner can normally be reached on Mon (12pm - 8pm), Tues (4pm - 8pm) and Fri (12pm - 8pm) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 6, 2010

RDH

/Ronald D Hartman Jr./

Primary Examiner

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